University of Missouri Extension



Fire and Rescue Training Institute



ANNUAL REPORT

## NTRODUCTION

## From the University of Missouri Extension



I am proud to recognize the dedication and commitment to excellence exhibited by the administration, faculty, and staff of the Institute in the training and technical assistance they provide. Fire service professionals in Missouri and nationally depend on the University of Missouri Fire and Rescue Training Institute (MU FRTI) to help them meet their fire service training and educational needs. As part of this, the Institute embodies the commitment made by the University in the 1930s to assist Missouri's Fire Service in training and education.

As a unit within the University of Missouri Extension, the Institute exemplifies the mission of a land grant institution by providing access to the citizens of Missouri to cutting edge information and training. We also realize the critical importance of the work performed by the Institute in providing the necessary competency based training that prepares our state's fire and emergency service first responders to safely fulfill their duties in the protection of Missouri citizens and communities.

I congratulate the faculty and staff of MU FRTI on another significant year in providing training and education, and I want to say thank you to our partners, constituents, and students for your continued support and participation in Extension and the Institute's training programs.

Beverly Coberly Associate Vice Provost and Associate Director University of Missouri Extension



## From the Harry S Truman School of Public Affairs



The University of Missouri's Fire and Rescue Training Institute (MU FRTI) continues to provide excellent service to firefighters throughout the state by ensuring that they receive the highest quality training. The Harry S Truman School of Public Affairs is proud to be a partner with the University of Missouri Extension in providing both the academic home for MU FRTI and the leadership enhancement program.

Faculty and staff from the Truman School and MU FRTI are working together on the development of an online graduate certificate course in emergency management with a view to it being available in 2016. We continue to explore other opportunities to strengthen ties for the benefit of Missouri's firefighter and first responder communities and for all Missourians.

On behalf of the Truman School, I congratulate Director Hedrick and his staff for their continuing commitment to public service.

Brian Dabson Associate Dean Harry S Truman School of Public Affairs, University of Missouri

#### Front Cover Photo

The University of Missouri Fire and Rescue Training Institute's mobile training and support trailer fleet is pictured in front of Faurot Field at Memorial Stadium, courtesy of the University of Missouri in Columbia.

#### Contents

Overview	4
Program Data	6 - 9
Program Areas	10 - 18
Additional Highlights	19 - 23

## From the MU FRTI Director

Cince the first Mid Missouri Fire College in 1933, the University of Missouri and the state's fire service has worked together to enable the very best in training for career and volunteer firefighters. We owe a great deal to those early fire service leaders, who laid the foundation for what would become the University's Firemanship Program, and then in 1982, an accredited Institute of the University. The University of Missouri Fire and Rescue Training Institute continues to recognize our heritage and the leadership role we have in ensuring Missouri's fire and emergency service first responders have the skills and knowledge necessary to fulfill their individual missions of protecting lives and property. On any given day, with the exception of holidays, the Institute has training courses in progress throughout the state.

Technology factors and the change in work culture and individual daily responsibilities have required the need to make training more accessible at the local level. MU FRTI is known for taking the training to the student, and we continue to recognize that need by delivering over 80% of our training classes at the local level where firefighters work and live. As part of that commitment, this year's annual report highlights our mobile training trailer fleet which provides the resources to extend advanced training classes to all corners of the state. This fiscal year, we replaced three technical rescue trailers with trailers designed to meet current equipment and storage needs. In addition, a new Grain Engulfment Rescue Simulator was added to the fleet, through a federal grant, to meet this emerging rescue challenge in the state.



Fire and Rescue Training Institute

In addition to capital equipment improvements, the Institute added a Curriculum Specialist position in FY15 to update current and develop new curriculum for our program. We also filled some vacant positions in our staffing structure to meet the operational needs of the Institute, and to better serve our constituents.

On behalf of the faculty and staff of MU FRTI, I want to express our appreciation to our training partners, host agencies, and you, our students, for your continued support of the Institute and our mission. Enabled by these partnerships and our students' desire to learn and acquire new skills, the Institute provided training to over 13,000 fire and emergency service first responders during the 2015 fiscal year, which occurred from July 1, 2014 to June 30, 2015. Through 605 classes, the Institute provided training for personnel representing all 114 Missouri counties, as well as participants from 31 other states.

MU FRTI remains committed to its mission and our goals of customer service, quality training, and safety. Thank you for your continued support of the Institute and the training programs we provide.

> David E. Hedrick, CPM, CFO Fire and Rescue Training Institute, University of Missouri Extension

#### Did You Know?

- ...Over 80% of MU FRTI programs in FY15 were conducted throughout the state at locations close to where firefighters work and live.
- ...For each \$1 received from MU Extension, MU FRTI generated \$3.85 in funding to support training deliveries.
- ...On average MU FRTI has 12 courses starting each week.
- ...With the exception of holidays, the Institute averages seven classes occurring somewhere in Missouri every day of the year.
- ...In FY15, the Institute traveled nearly 200,000 miles to deliver training.
- ...MU FRTI's website averages 772 visits per day.

# O V E R V I E W

## History of the Fire and Rescue Training Institute

Though fire service training has always been a part of every organized fire department, the early years in Missouri had limited training opportunities outside one's own department. In 1933, mid-Missouri fire departments joined with the University of Missouri to address the need for more advanced training. Through their efforts the first Missouri Central Fire School was conducted that year. The purpose of the first school was to provide "training that was needed for firefighters to perform their duties safely and efficiently." The Missouri Central Fire School was a great success and became an annual event. The name of the school changed to the Summer Fire College, and then to the name it bears today Summer Fire School. From these modest beginnings the University of Missouri took a lead role in the training of Missouri's fire and emergency service responders. This training mission has continued for over three quarters of a century.

Statewide fire training in Missouri remained fairly rudimentary throughout the 1930s and early 1940s. Summer Fire College, supported by the University, remained the single main initiative. In 1941, the State Department of Vocational Education instituted one Fire Instructor position to conduct training in the state. The instructor that was appointed to fill the position was W. Bush Walden. The Missouri Inspection and Rating Bureau, an insurance industry group, took over responsibility for fire training in 1944 and Instructor Walden transferred with the program. The University continued to play a role during this transition as both state entities partnered with the University to continue to offer the annual Summer Fire School. Three years later, state fire training found a permanent fulltime home with the University of Missouri when the Rating Bureau turned over all programming to the University. A fulltime fire service training program was created within the University of Missouri as part of the Division of Adult Education and Extension Services. The new program was named the "Firemanship Training" program. Instructor Walden continued his position as the fire service instructor with the new program. Walden retired from the program in 1973 with the title of Coordinator of Fire Training. Over the years the program continued to expand and offer new courses. In 1976, the name changed to the Missouri Fire and Rescue Training Program to better reflect its expanded training mission.

Through the dedicated work of key leaders in the state's fire service along with the support of Missouri's fire service, the University of Missouri provided additional resources to expand the program. With the expansion, the University granted full Institute accreditation to the program on July 1, 1982, and formally changed the name to the Missouri Fire and Rescue Training Institute (University Archives, University of Missouri-Columbia). In compliance with changes on the University of Missouri Columbia campus, the Institute's name was officially changed in 1991 to the MU Fire and Rescue Training Institute, the name it retains today.



Throughout its existence the Fire Training Program/Institute has been a unit within a number of different academic colleges or divisions of the University, as well as occupied a variety of home locations on the University's Columbia campus. During the 70s and 80s, Fire and Rescue Training was a part of the College of Public and Community Services. Though the program was tied programmatically with the Division of Extension starting in 1982, it did not fully transfer into Extension until 1988, when the College of Public and Community Services was disbanded.

With the establishment of the United States National Fire Academy in the 1970's, MU FRTI became the designated NFA state partner. The Institute works in

concert with the National Fire Academy (NFA) and the U.S. Fire Administration (USFA) to provide NFA programming at the state level. As the local face of the National Fire Academy, MU FRTI maintains the same quality of instruction and high standards established by the National Fire Academy. As the state Enfranchised Program for the NFA, the Institute teaches NFA hand-off courses, as well as teaching curriculum developed by MU FRTI that carries dual credit with the NFA.

The University of Missouri Fire and Rescue Training Institute continues to recognize the heritage and leadership role it has in ensuring Missouri's fire and emergency service first responders have the skills and knowledge necessary to fulfill their individual missions of protecting lives and property. For a more detailed history of MU FRTI, visit www.mufrti.org/about.



## Report Synopsis

The mission of the University of Missouri Extension's Fire and Rescue Training Institute (MU FRTI) is to provide training that meets the needs of fire and rescue personnel and other emergency managers and responders so that they can better protect lives and property within their communities. In fulfilling this mission, MU FRTI has a direct impact on the well-being and protection of Missouri's estimated 29,000 firefighters and the 6 million citizens they serve.

The Institute self-generates approximately 79% of its operational budget by means of federal, state, and local grants, contracts, and fees. The accredited coursework of the Institute is taught through a diverse delivery system across the state providing accessible, multidiscipline education and training.

The Institute conducted 605 classes with a total enrollment of 13,005 students for fiscal year 2015. The training received by these students equates to 152,585 student instructional hours. Through MU FRTI's field extension program, the Institute reached students in all of Missouri's 114 counties in the state. In addition, the Institute had student enrollments from 31 other states, and five foreign countries. MU FRTI personnel, vehicles, and support trailer fleet traveled almost 200,000 miles to deliver training in FY15. Every hour of instruction received and every emergency first responder trained translates directly into safer firefighters and safer communities.

## Public Value Message

Training provided by the University of Missouri Fire and Rescue Training Institute (MU FRTI), enables students to gain the knowledge and skills that will improve their abilities to handle or mitigate fires and disasters which will result in safer firefighters, safer citizens, safer communities, and a safer state/nation.

### Mission Statement

The mission of the University of Missouri Fire and Rescue Training Institute is to plan, develop, deliver, and administer state-of-the-art continuing professional education courses which meet the comprehensive training needs of fire and rescue personnel and other emergency managers and responders utilizing the most efficient and effective means possible, thereby enabling them to better protect lives and property within their communities.

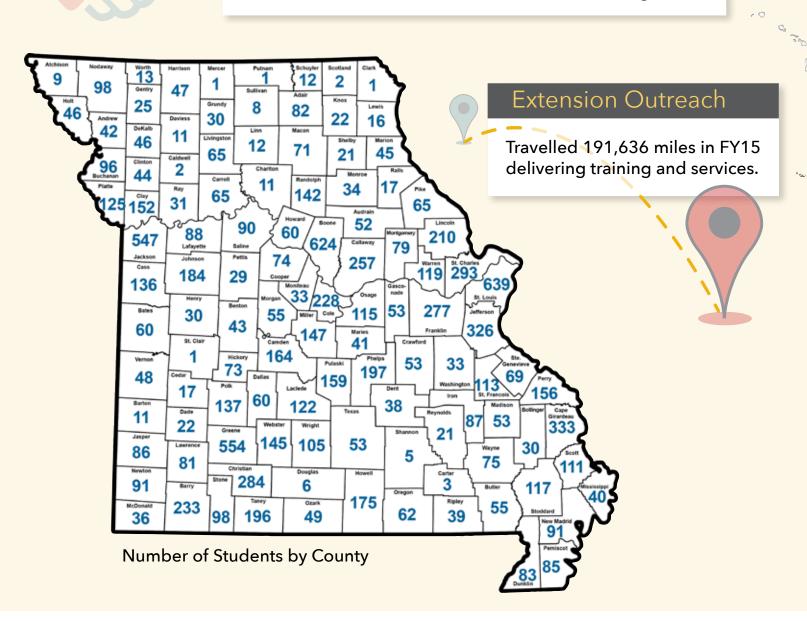
## **Education and Training Provided**

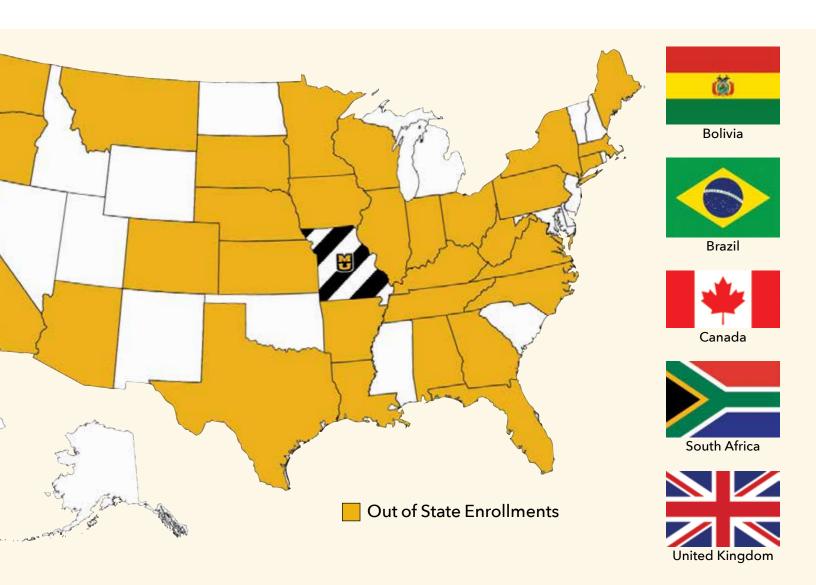
- 13,005 Enrollments/Fire and Emergency Service Personnel
  - 605 Courses conducted
- 152,585 Student Instructional Hours
  - 1,090 Fire Departments/Organizations/Agencies served





- Missouri All Missouri 114 counties
- United States 31 states, and five countries: Bolivia, Brazil, Canada, South Africa, United Kingdom.





#### Missouri's Fire Service

Missouri has 822 fire departments/fire protection districts in the state that are served by an estimated 29,000 firefighters. They protect a population of 6 million people dispersed over 68,886 square miles. On average, there are approximately 5 firefighters for every 1,000 citizens in the state. By geographic distribution, there is on the average one firefighter per three square miles. The state continues to be protected mostly by volunteer firefighters with approximately 80% of the state's fire service classified as volunteer or part-paid.

According to the Missouri Division of Fire Safety, there were over 450,000 incidents that fire departments responded to in calendar year 2014. Each and every day, Missouri firefighters and emergency personnel have the potential to respond to fires, emergency medical events, and disasters in order to protect their citizens and communities. When these incidents occur, the state's emergency responders valiantly work to aide in the mitigation of these incidents and assist in the restoration of their communities. The occupation or avocation of firefighting by its very nature has inherent risks.

During this past year, two Missouri firefighters were lost in the Line of Duty while protecting their fellow citizens. MU FRTI faculty and staff extend our deepest sympathy to the fire departments and families of these honored heroes, and we continue our dedicated commitment to reducing Line of Duty deaths by developing better prepared and trained firefighters.



### Fiscal Matters and Responsibilities

MU FRTI gratefully acknowledges the funding resources provided by the University, Extension, and state and federal government and organizational partners. The on-going assistance and resources provided by our partners will assure the continued success and financial health of the Institute.

MU FRTI self-generates approximately 79% of its operational budget through fees, contracts, and grants. MU FRTI continues to practice good stewardship in keeping administrative costs low, directing resources to instruction, and effectively utilizing subsidy funds to make training as accessible as possible to Missouri's fire and emergency service responders.

Funding Sources	
35%Fees and Tuition	
21%Extension Support	
17% State Grants and Contracts	
17%Federal Grants and Contracts	
5%Local and Regional Grants and Contracts	
3%Gifts	
2%Other Contracts	



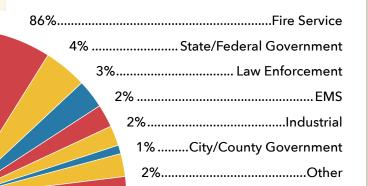
"Your good training paid off. A truck ran through the side of a small church and came to rest on top of a 100 lb propane bottle that was leaking. My guys diverted traffic, opened doors and set fans back a safe distance to move the visible propane cloud near the floor. Nobody was hurt. Thanks!"

Glen Whitener Hayti Fire Department

### Program Accessibility

Programming is open to all qualified fire and emergency first responders and emergency managers on an equal opportunity basis. In FY15, MU FRTI conducted over 80% of the training courses at local "host" departments or agencies. With the majority of the state's fire service considered volunteer or part-paid this local access and flexibility assures training opportunities for all firefighters. MU FRTI is known for "bringing training to the student," which includes, where necessary, the transport of specialized fire training props and equipment to training locations throughout Missouri, as well as other states. MU FRTI has a fleet of training support and equipment trailers that range from small cargo trailers to semi-tractor trailers. In FY15 MU FRTI personnel, vehicles, and support trailer fleet traveled 191,636 miles to deliver training.

#### **Enrollment by Occupation**















#### **Student Composition**

Programming is open to all qualified fire and emergency first responders and emergency managers on an equal opportunity basis. MU FRTI's student composition is similar to the overall composition of the fire and emergency service responders in the state. Based on student surveys, 10% of MU FRTI students have less than one year of in-service experience while 48% have 1 to 10 years of inservice experience. Further demonstrating the ever-present need to learn in the fire service, 18% of the student population in FY15 has over 20 years of in-service experience. In FY15, MU FRTI's training programs had students representing all 114 counties in Missouri.



"Best Winter Fire School I have been at!

Scott Barthelmass Eureka Fire Protection District

#### **Customer Satisfaction**

To judge the effectiveness of each course that MU FRTI presents, a course evaluation is completed by each student in the course. The evaluation form provides the opportunity for the student to give feedback through answering questions regarding these six areas: course, visual materials, activities, printed materials, instructor(s), and classroom. A numerical rating scale is used to tabulate responses on a scale of 0 to 4 which corresponds to a letter grade of "F" to "A". MU FRTI's overall customer satisfaction rating increased in a number of areas to an average of 3.3, a B average, in FY15.

Rating System: 0 to 4.0	FY 15	FY 14	FY 13	FY12	FY 11
Course	3.2	3.1	3.1	3.0	3.0
Instructor	3.4	3.4	3.4	3.4	3.4
Classroom	3.2	3.2	3.1	3.1	3.1
Outside Activities	3.3	3.2	3.2	3.1	3.1
Visual Materials	3.3	3.2	3.1	3.1	3.1
Printed Materials	3.3	3.2	3.1	3.1	3.0
Overall	3.3	3.2	3.2	3.1	3.1

## Report from the Associate Director



The Associate Director of the Fire and Rescue Training Institute is responsible for ▲ management of daily operations of the Institute along with oversight of special projects and conferences. The position provides assistance and back-up to the Director in the accomplishment of the programmatic objectives of Extension's training and education mission. The Associate Director oversees the Specialist positions and their program areas within the Institute. The Associate Director position also acts as the liaison/ coordinator for various electronic communications and data storage resources of the Institute. This position may have additional responsibilities as determined by the Director.

#### **Distance Learning Courses**

In FY15, MU FRTI continued to offer online courses to meet the demands of emergency responders. These courses include: Introduction to Emergency Management for the Fire Service; Principles of Building Construction: Combustible; Principles of Building Construction: Non-Combustible; and Hazardous Materials Incident Response: Awareness (HMIR:A).

The HMIR:A course continues to receive funding support from the Division of Fire Safety and the Fire Safety Education/ Advisory Commission to make this online class available at no-cost.

Courses	15
Enrollment	974
Instructional Hours	8,052

#### Curriculum Updates

With the delivery of a new training prop for Grain Engulfment Rescue, came the need to develop a new curriculum. We wish to thank the Kansas Fire and Rescue Training Institute for sharing their existing curriculum; we have updated it with current data and tailored it to Missouri response needs. Statistics indicate that entrapment and engulfment incidents rose in a ten year average, and with our states agriculture base, it is imperative that responders be adequately prepared to handle these unique incidents. This new prop and program is already heavily scheduled as we begin FY16.

### National Fire Academy

Since the establishment of the U.S. Fire Administration's National Fire Academy (NFA), it has worked in concert with the state fire training systems to make NFA programming as accessible as possible. As part of the NFA/State Training System partnerships, various joint training opportunities were developed using enfranchised, approved, and/or state sponsored programming. It is through this partnership in Missouri that MU FRTI has been the statewide point of contact for the NFA for more than 30 years.

In joint partnership in FY15, MU FRTI and the NFA coordinated the delivery of seven direct course deliveries and one six-day Regional Delivery from the National Fire Academy. MU FRTI conducted 25 NFA courses as in-state deliveries through the NFA state training grant program. In addition through the Approved Course agreement between the NFA and MU FRTI, the Institute registered 151 courses with the NFA for dual credit for 3,204 students, equating to 41,640 student instructional hours for these NFA courses alone.



#### MU FRTI Instructor Conference

The MU FRTI Instructor Conference is designed for those individuals preparing and presenting training programs for fire, rescue and EMS personnel, and public fire education. Instructors and other supervisory personnel reported this conference was valuable in planning for the training needs of their organizations. The Instructor Conference for FY15 was held at the Country Club Hotel at the Lake of the Ozarks in October and was approved for up to 20 hours continuing education credits by the Missouri Division of Fire Safety. The participants of the conference had the opportunity to select from four workshops to assist with improving their own instructional

skills. Also, MU FRTI conducted four Trainthe-Trainer (TtT) workshops as pre-conference opportunities for instructors to pick up hand-off courses from the Institute.

them readily available to the fire service.

Courses	11
Enrollment	481
Instructional Hours	. 2,280



#### **Emergency Medical Technician Registered Programs**

The University of Missouri Health Care - Emergency Medical Services Education (UMHC EMS) conducts pre-hospital EMS professional education for Basic and Advanced Life Support. This education includes the initial training for Emergency Medical Technician (EMT) or Paramedic, and also the continuing education for recertification. UMHC EMS Education partners with MU FRTI on EMS training courses to make

Courses ......2 Enrollment ......26 Instructional Hours ... 11,844

## Curriculum Development

The Curriculum Specialist for MU FRTI is responsible for the development and review of curriculum for instructional programs within the Institute as it relates to national, state and local standards. Curriculum is developed in coordination with Institute Instructors with subject matter expertise and partner agencies and organizations.

In conjunction with the transition of the Fire Officer I and II level certification to the NFPA 2014 Edition, MU FRTI is continuing to work on updating appropriate curriculum to the Jones and Bartlett Fire Officer Principles and Practices curriculum.

In FY15, MU FRTI developed a new Command and Control of Incident Operations: Company Officer course. This new course is a one-day overview with computer-aided



simulation for current and aspiring company officers. MU FRTI received funding from MU Extension for the purchase of software and hardware, and development of a computer based simulation course. Research indicates that company officers have fewer opportunities to hone their skills from actual response experience, and the need for computer-based simulation is essential to provide for the safety of firefighters under their supervision. This course will be available in the first quarter of FY16.



## Aircraft Rescue and Firefighting



The Aircraft Rescue and Fire Fighting (ARFF) Program provides specialized fire ▲ training to the Federal Aviation Administration (FAA) Part 139 certificated airports in the FAA central region and across the nation. MU FRTI's ARFF Program utilizes a 50foot Mobile Aircraft Fire Training (MAFT) simulator to provide realistic, effective fire and rescue training on-site at airport locations. This simulator provides ARFF personnel and other local mutual aid responders the opportunity to practice handling aircraft incidents in their local jurisdiction utilizing their own equipment and resources. The Institute's ARFF program is recognized by the FAA for meeting initial training and recertification requirements for ARFF personnel. In FY15, the ARFF program provided training to Missouri FAA commercial indexed airports, and to airports in seven other states.

#### ARFF Program Highlights During FY15:

- MU FRTI continues to partner with other state training entities to provide handson "live" fire training for airport recertification in their state. MU FRTI is proud to partner with University of Kansas Fire and Rescue Training Institute (KU FRTI) and Texas Engineering Extension Services (TEEX) for ARFF training.
- The ARFF Program, on short notice, assisted Vero Beach Municipal Airport in Vero Beach, FL, to complete their required Part 139 live fire training.

Courses	55
Enrollment	962
Instructional Hours	6.572

## Military Program



The Military Program was established to I more effectively coordinate the respective activities of University of Missouri Fire and Rescue Training Institute (MU FRTI) with military units and agencies at the local, state and national level. The Military Programs Coordinator serves as the principal point of contact and coordination to liaise with the Department of Defense (DoD) agencies in an effort to assist MU FRTI to coordinate, plan, and conduct activities with the military community. To achieve the best use of MU FRTI's assets and resources, the program reinforces community and private relationships that enhance the various missions of each agency or unit.

### FY15 Projects/Services

- Missouri National Guard
- Missouri Department of Natural Resources

"I was not able to be with the guys on the last day of ARFF training, but I wanted to thank the instructors for their patience and everything they did for us. Everything went great."

> **Troy Breitag** Medical/Fire Rescue Lake Area Technical Institute Watertown, South Dakota



## **Emergency Management Program**

s the effects of natural and man-made disasters become more rapid, far-reaching, and widespread, all levels of governments must grapple with the limitations of its capabilities. To address the issue of building community resilience and providing services for the entire community, the Federal Emergency Management Agency (FEMA) has adopted the "Whole Community" approach. This approach goes beyond the traditional, "government-centric" approach to emergency management and embraces a philosophy and operational posture that leverages, and serves, the whole community. MU FRTI embraces and fully supports this concept through the services the Institute delivers through the MU FRTI Emergency Management Program. The program includes all aspects of services needed to build a strong emergency management program such as planning, training, Homeland Security Exercise and Evaluation Program (HSEEP) compliant exercises, and development of products, and services stakeholder specific.

Another aspect of the commitment of MU FRTI to assist communities build resiliency is through a cooperative effort of both the Institute and the Community Development program within University of Missouri Extension through the Community Emergency Management Program (CEMP). Extension specialists across Missouri use this program to provide support to local communities in their resiliency and capacity building activities.



### **FY15 Projects**

- MU Extension has been in partnership with the MO State Emergency Management Agency (SEMA) since 2002, helping build community networks to support federal, state, and local emergency management efforts, providing disaster preparedness education to communities, businesses, and local governments, and assisting citizens in disaster recovery efforts. In 2014, the Community Organizations Active in Disaster (COAD) Guidance Manual was developed and is currently being used by the MU Extension program and local communities in the development of COADs. Through
  - a second USDA grant, and in conjunction with SEMA, the COAD Guidance Manual is being expanded to include resources that address agriculture and rural community issues.
- Through a joint collaboration between the University of Missouri Veterinary School of Medicine, and our institute, MU FRTI faculty developed and taught a course to second year students entitled Animals in Emergencies and Basic Emergency Response Training for Veterinary Students. This is the third year for the course and is back by popular demand.
- Member of the Missouri Governor's Faith-Based and Community Service Partnership for Disaster Recovery (aka The Partnership), the Missouri Voluntary Agencies Active in Disaster (Missouri VOAD), and the Missouri Faith-Based Organization Disaster Initiative.

Courses	12
Enrollment	420
Instructional Hours	5,122

Catherine Vogelweid, PhD Veterinary Pathobiology University of Missouri "The veterinary school has been contacted by the state vet's office to place vet students in the field on surveillance teams for high-path bird flu this fall. So the training that our students received from MU FRTI in donning-doffing PPE, ICS and NIMS, and the FAD tabletop are going to be put to use in a real field exercise. I am very excited about this! A great accomplishment for all of us!"

## Special Operations Training



'U FRTI conducts various technical fire and rescue programming to meet the **L**specialized needs of the fire and emergency services response community. Though these programs are delivered locally they are scheduled and managed out of the MU FRTI main office. Programs include: Hazardous Materials, LPG Program, Industrial and Business Safety, Technical Rescue, and Fire Cause Determination and Arson Awareness and Prevention.

#### Hazardous Materials Training

The Hazardous Materials Program provides training to those responders who may be actively involved in the mitigation of incidents that involve hazardous materials and/

or weapons of mass destruction. These programs include courses designed for the awareness level responder up to, and including, technician level responders.

Courses	33
Enrollment	1,373
Instructional Hours	14.132

Funding Support Provided By

- Missouri Division of Fire Safety and Fire Safety Education/Advisory Commission -Chemical Emergency Preparedness Fund (CEPF)
- Missouri State Emergency Management Agency

#### Liquefied Petroleum Gas Program

The Liquefied Petroleum Gas (LPG) program provides the requisite knowledge and skills necessary to first responders so they can safely respond to and mitigate incidents involving the release of LPG. The program utilizes various mobile training simulators that provide real world skills training to the participants. The program includes both a mobile propane tank and

a propane transport truck simulator which provide realism to the course. The LPG program works in conjunction with the Missouri Propane Education and Research Council (MOPERC) and the Missouri Propane Gas Association which promotes LPG safety and education to Missouri's first responders.

Courses	9
Enrollment	183
Instructional Hours	. 2.196

Funding and/or Program Support Provided By

- Missouri Propane Education and Research Council (MOPERC)
- Missouri Propane Gas Association
- Missouri Division of Fire Safety/ Fire Safety Education-Advisory Commission - Chemical Emergency Preparedness Fund (CEPF)



#### Industrial and Business Safety

The Industrial and Business Safety Program provides training to industrial fire brigade members as well as emergency response teams. The courses are intended to provide these responders with the tools to handle incipient fire emergencies to structural

fire response, confined space and high angle rescue, and hazardous materials incidents. These programs are tailored to meet the needs of the client by incorporating industry emergency response plans and operational procedures in the development of the individualized training programs. Courses are conducted on-site at industrial facilities and/or host fire training facilities depending on the course activities and skills.

Courses	16
Enrollment	173
Instructional Hours	1,740

#### Technical Rescue Programs



The Technical Rescue Program provides the requisite knowledge and skills necessary to fire and emergency responders to ensure that they safely and efficiently respond to and mitigate incidents requiring technical expertise. The specialized disciplines in this program area include Rope Rescue, Confined Space Rescue, Trench Rescue, Structural Collapse Rescue, Swiftwater Rescue, and Rescue Boat Operations. The training prepares first responders

to mitigate incidents from natural or man-made disasters such as earthquakes, tornadoes, or a terrorist event.

Courses	108
Enrollment	.1,726
Instructional Hours 3	31,440

#### Agencies Providing Contracts and Grants in FY15

- Missouri Division of Fire Safety Missouri Fire Safety Education/Advisory Commission
- St. Louis Area Regional Response System (STARRS)
- Mid-America Regional Council (MARC)

- Region D Regional Homeland Security Oversight Committee (RHSOC)
- Missouri Highway Safety Commission
- State Farm Insurance

#### Fire Cause Determination and Arson Awareness and Prevention

The Fire Cause Determination and Arson Awareness and Prevention program was designed to provide students with the basic knowledge necessary to identify accidental or incendiary fire indicators. Students are provided with the opportunity to investigate a simulated fire; this is accomplished with the use of a 53-foot simulation trailer that comes equipped with three burn rooms.

The rooms are furnished with various items such as, sofas, mattresses and office furniture to simulate a home or office setting. Funding for this program was provided by the 2012 Department of Homeland Security/Federal Emergency Management Agency - AFG Fire Prevention and Safety Grant.

Courses	7
Enrollment	103
Instructional Hours	1,616

"In March of this year our fire department hosted MU FRTI's training course entitled Mobile Water Supply Operations. The attendees included five neighboring fire departments in our county. The course was an excellent learning opportunity, as well as a challenge, that is often the case in rural Missouri working with limited resources. I feel that this course gave the participants the tools and knowledge to overcome some of the obstacles we face with limited resources Phil Rickabaugh, Fire Captain and to be better prepared to respond." Maryville DPS Fire Division, Missouri

## Field Extension Program



The Field Extension Program housed within the Institute is responsible for **L** coordinating all of the operational activities of fire and emergency response training courses, delivered using a field extension format across the state. This program oversees and allocates state funding sources for direct field training deliveries and the scheduling of regional conferences. MU FRTI appreciates the successful partnership with all our state and federal partners, in providing funding subsidy for the delivery of no-cost statewide training for Missouri's fire and emergency service responders. The Field Extension Program traveled an estimated 71,000 miles in FY15 as part of the field extension outreach to provide accessible training courses.

#### State Funded Programming

State Fire Training Funds (General Revenue, Fire Education, and CEPF) provided to MU FRTI by the Division of Fire Safety (DFS) and the Missouri Fire Safety Education/ Advisory Commission enabled a total of 80 subsidized classes for a total enrollment of 2,362 students, which equated to 24,260 student instructional hours.

Missouri Fire Education and General Revenue Training Funding

Courses ......62 Enrollment ......1,289 Instructional Hours ... 15,108 Chemical Emergency Preparedness Fund

Courses ......18 Enrollment ......1,073 Instructional Hours ..... 9,152

### Missouri Department of Transportation Highway Safety Grant

Missouri Department of Transportation (MODOT) Highway Safety Grant provided funding that was contracted with MU FRTI to conduct highway safety emergency response related courses in FY15. MU FRTI is pleased to partner with MODOT on highway safety initiatives directed to fire and emergency service responders. Data to the right reflects courses conducted within the MU FRTI fiscal year that encompasses a portion of two grant years.

Courses ......36 Enrollment ...... 828 Instructional Hours ..... 8,504

#### National Fire Academy State Fire Training Grant

The United States National Fire Academy (NFA) through the State Fire Training Grant program provided funding to MU FRTI to conduct NFA "Hand-off" and "Approved" courses within the State of Missouri in FY15. The data to the right reflects courses conducted within the MU FRTI fiscal year that encompasses a portion of two grant years.

Courses ......25 Enrollment ...... 568 Instructional Hours ..... 6,756

#### State Farm Insurance Gift FY15

In 2014, the Institute was pleased to engage the support of a new partner organization in providing support for a specific fire service training project. State Farm Insurance provided a gift to Extension/FRTI to support technical rescue training for emergency first responders that handle vehicle accidents. State Farm provided another gift for the 2015 calendar year and will include the support of additional training in the first half of FY16.

Courses ......17 Enrollment ......340 Instructional Hours ..... 5,056

### Fireman's Fund/Heritage Program Gift

In FY15, the Institute was pleased to engage the support of a new partner organization in providing support for a specific fire service training project. Fireman's Fund Insurance Heritage Program provided a gift to MU FRTI to support the delivery of the

Basic Fire Fighter Skills course to four selected fire departments in the state. The project addressed the initial training needs of new firefighters, as well as continuing refresher training to existing firefighters. The training was focused on improving firefighter proficiency resulting in a reduction in loss of lives and property.

Courses	4
Enrollment	60
Instructional Hours	1,792

#### Regional Schools

MU FRTI conducted two Regional Fire Schools in FY15. Regional Fire Schools bring multi-course programming in a weekend format to geographic areas of the state with course work designed to meet regional training needs or concerns. Regional Fire Schools were conducted in Region E - Cape County, MO. A total of 74 students participated in this Regional Fire School, completing 1,788 student instructional hours of training.

#### Regional Training Coordinator System

To assist in the management and coordination of field extension training across the state of Missouri, MU FRTI has a well-established Regional Training Coordinator System. The state is divided into regions geographically corresponding to Missouri State Highway Patrol regions with an identified Regional Coordinator. These Field Coordinators provide a ready resource to enable fire departments at the local level to access and schedule needed training. Instruction is provided through MU FRTI's adjunct instructional cadre located throughout each region. Regional Training Coordinators can be contacted directly or through requests made to MU FRTI's main office.





















## Winter and Summer Fire School Conferences



\*ollowing a long history and tradition of excellence in fire service training which Pollowing a long history and tradition of executive II I I began with the first mid Missouri State Fire College in 1933, MU FRTI continues to provide state fire schools to meet the training needs of Missouri's fire and emergency responders. There are two annual fire schools offered each year that attract emergency responders from across Missouri, and throughout the Midwest United States. Scholarship opportunities are available each year for WFS and SFS through the Phil Sayer Memorial Scholarship Fund. Scholarship funding support is provided by the Missouri Division of Fire Safety and the Missouri Fire Safety Education/Advisory Commission.

#### Webcast for Distance Learning

MU FRTI continues to conduct selected courses via webcast that included an onsite student audience, in addition to the distance learners across the Midwest during



Winter Fire School. The courses were made available to registered locations by means of web access, and provided a great learning opportunity for those that were unable to physically attend the WFS in Columbia, MO.

Courses	3
Enrollment	788
Instructional Hours	3,152

#### Winter Fire School

Winter Fire School (WFS) is held in Columbia each February. The event offers a diverse variety of classes to choose from in a weekend format. In addition to Missouri students, there were students from seven other states represented in FY15. The Midwest's largest Equipment Exposition associates with WFS and provides excellent opportunity for



learning and networking. The success of WFS is due not only to the experienced instructors, an effective Command Team, a dedicated staff, our fire service partners and supporters, but especially to the fire departments and individual student participants. Thank you for continuing to support important

training event.

Courses ...... 113 Enrollment ......3,055 Instructional Hours ... 13,080

#### Summer Fire School

Summer Fire School (SFS) Midwest Wildfire and Training Academy (MWTA) were held in Jefferson City, June 3-7, 2015. This annual event offers both classroom-oriented hands-on courses ranging from seminars to week-long programs. The MWTA, held in conjunction with SFS, focuses on the practical skills training required by today's



wildland firefighters and is made possible through a grant with the USDA Forest Service. In addition to Missouri students, there were students from eleven other states represented.

Courses	26
Enrollment	430
Instructional Hours	8,785

Fire Schools also generate a positive economic impact on Columbia and Jefferson City where they are held. It is estimated that the events each bring in over half a million dollars to the local community through direct and indirect expenditures by the participants and guest faculty.

## Administration and Support

The daily operations and support functions of MU ■ FRTI are provided by a dedicated administrative and support staff. Course paperwork, data entry, transcripts, instructor travel, curriculum and promotional material development, course supplies and equipment logistics are

> all a necessary part of the coursedelivery process. MU FRTI is proud of the dedicated staff that works behind the scenes to make sure the students and instructors have a successful educational experience.



Fiscal Manager



Fiscal Office Assistant



Office Support Assistant



Office Support Assistant



Instructional Support Associate



Multimedia Specialist

### Company Officer Certificate Program

en individuals completed the Company Officer Certificate Program this year. This program requires 373 contact hours of instruction in different areas pertinent to a company officer. This certificate program exceeds the requirements of Fire Officer I and II according to NFPA 1021, Standard for Fire Officer Professional Qualifications. The program has had a total of 227 student certificates issued since the program's inception. Currently the program has 46 active participants.

### 2014-2015 Graduates

Carl Brunner - Branson Fire and Rescue Kenneth Elliott - Lincoln County Fire Protection District #1 Joseph Krill - Tri-County Fire and Rescue William Lamar - St. Joseph Fire Department Michael Massey - Jackson Fire Department Robert Monier III - Springfield Fire Department David Tyson Medlock - Jackson Fire Department Brien Reinke - Branson Fire and Rescue Kristin Troup - Creve Coeur Fire Protection District David Wheeler - Lebanon Rural Fire Protection District

## ADDITIONAL HIGHLIGHTS

#### Fire Service Leadership Enhancement Program

In FY15, the 13th Annual Fire Service Leadership Enhancement Program provided executive leadership training for current and future fire chiefs. This program is a joint activity conducted by the Harry S. Truman School of Public Affairs. Twenty-four executive fire officers representing thirteen fire agencies completed the program this year.



#### National Fallen Fire Fighters Foundation

Through a cooperative program initiative with the National Fallen Fire Fighters Foundation, MU FRTI assisted the NFFF state advocates in delivering the "Courage to Be Safe" and the "Leadership, Accountability, Culture and Knowledge" training programs throughout the state. The training was supported by funding provided through the Division of Fire Safety and the Missouri Fire Safety Education/Advisory Commission. Through this partnership initiative, eight classes were delivered training 131 firefighters.



### Special Thanks!

The University of Missouri Fire and Rescue Training Institute wishes to extend sincere gratitude to the University of Missouri, MU Extension, governmental department/agencies, fire and emergency service personnel, departments, associations, organizations, and elected officials, as well as businesses and industries throughout the state for their continued support.

#### Fire Service Instructor of the Year Award

Mu FRTI presented the Fire Service Instructor's Conference on October 25, 2014. The recipient of the Mu FRTI Instructor of the Year award was Michael Arnhart, Chief with the High Ridge Fire Protection District in High Ridge, MO. Instructor Arnhart exemplifies excellence in fire service instruction and the Institute is proud of his commitment to ensuring all his students are prepared and ready to meet the challenges faced by fire and emergency service first responders. Arnhart has been an adjunct instructor with the MU FRTI program since 1991.



#### New Grain Engulfment Rescue Training Program

In 2014, MU FRTI received a grant from the U.S. Dept. of Homeland Security/FEMA's Assistance to Firefighters Grant Program. This grant enabled the purchase of a mobile Grain Engulfment Rescue Simulator to provide hands-on training in grain bin rescue.

Missouri, a part of the U.S. grain belt, has a high percentage of agricultural activity associated with grain production. The activities around and within the grain bins have the potential for entrapment or engulfment that can result in serious injury or death to the worker as well as the first responder to an incident. The mobile unit provides students with the opportunity to apply skills acquired in a classroom in realistic hands-on training scenarios utilizing a grain hopper, grain bin, and a cut panel station.



#### Programming Accreditation / Acceptance

American Council on Education (ACE) U.S. National Fire Academy (NFA) Division of Fire Safety (DFS) State Emergency Management Agency (SEMA) Missouri Emergency Response Commission (MERC) Missouri Bureau of Emergency Medical Services (EMS) Missouri Propane Education and Research Council (MOPERC) Peace Officer Standards and Training (POST) Columbia College Office of Domestic Preparedness/ Department of Homeland Security

"The grain engulfment course was a great success for our regional rescue team. We trained over 100 firefighters over the three days along with industry personnel. The opportunity also opened up a line of communication with local grain companies that did not exist before."

> **Todd Ackerson** Rescue Division Chief Kansas City Fire Department

### Top Five Participating Fire Departments



Columbia Fire Department



Jefferson City Fire Department



Kansas City Fire Department



Saint Louis Fire Department



Springfield Fire Department

The MU FRTI 2015 Annual Report was developed in-house and produced using self-generated revenue.

Project Design: Travis Johnson, MU FRTI Multimedia Specialist Photos: MU FRTI Archives, unless otherwise acknowledged Printing: University of Missouri Printing Services

For More Information about the education and training programs available through the University of Missouri Fire and Rescue Training Institute, please visit our website:

www.mufrti.org

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#### Partnerships, Donors, and Supporters

MU FRTI's many strategic partnerships allow the Institute to share knowledge and provide training resources throughout Missouri and beyond. We wish to recognize and thank our training partners who have consistently supported the training and education initiatives of the Institute.

Division of Fire Safety/Fire Marshal's Office (DFS)

Missouri Fire Safety Education/Advisory Commission

State Emergency Management Agency (SEMA)

Missouri Department of Transportation (MODOT)

- Highway Safety and Aeronautics

Fire Fighters Association of Missouri (FFAM)

Missouri Association of Fire Chiefs (MAFC)

Missouri Association of Fire Protection Districts (MAFPD)

National Fire Academy (NFA)

Training Resource and Data Exchange (TRADE) Region VII

Missouri Propane Education and Research Council (MOPERC)

Missouri Emergency Response Commission (MERC)

State Farm Insurance

Fireman's Fund Insurance/Heritage Program

University of Missouri Extension

Department of Natural Resources (DNR)

U.S. Department of Homeland Security/ Federal Emergency

Management Agency (DHS/FEMA) Grants Program

North American Fire Training Directors (NAFTD)

Missouri Fire Alliance

MFA Incorporated - Agri Services

**Brock Grain Systems** 

#### Host Departments/Entities

Mu FRTI delivers the majority of our programming at the local level to make training accessible to where firefighters live and work. To do this, the Institute depends on the sure in the local level to make training accessible to where firefighters live **L**and work. To do this, the Institute depends on the support and cooperation of fire departments and affiliated agencies in hosting these locally delivered training courses. In sincere appreciation for their support in hosting training programs with MU FRTI in FY15, we wish to recognize the following entities:

185th ARW Fire Emergency Services

Affton Fire Protection District

Alton Fire Department

American Red Cross - Southeast Chapter

Arrow Rock Community Volunteer Fire Department

**Battlefield Fire Protection District** 

**BB Road Fire Department** 

**Bethany Fire Department** 

Biehle Community Fire Protection Association

Billings Fire Protection District

**Bolivar City Fire Department** 

**Boone County Fire Protection District** 

**Branson Airport** 

Branson Fire and Rescue

**Butler Fire Department** 

**Butterfield Fire Department** 

Camdenton City Fire Department

Campbell Fire Department

Cape County Firefighters Association

Career and Technology Center at Fort Osage

Carterville Volunteer Fire Department

Cassville Fire Protection District

Cedar Hill Fire Protection District

Center for Education and Development

Central Crossing Fire Protection District

Central Taney County Fire District

Chadwick Rural Fire Department

Charleston Department of Public Safety

Cherokee Pass Volunteer Fire Department

Chillicothe Fire Department

City of Rolla Fire and Rescue

Clearwater Fire Protection District

Clever Fire Protection District

Cole Camp and Rural Fire Department

Columbia Fire Department

Columbia Regional Airport

Cooper County Fire Protection District

**Dent County Fire Protection District** 

Dexter Fire Department

Duenweg Fire Department

**East County Fire Protection District** 

East-West Gateway Council of Governments

Eastern Iowa Airport

Eastern Randolph Rural Fire Department

**Edgerton-Trimble Fire Protection District** 

Eldon Fire Department

Emergency Services Training Institute Texas Engineering

**Extension Service** 

Fair Grove Fire Protection District

Farber Volunteer Fire Department

Fire and Rescue Training Institute

Firefighters Association of Missouri

Forsyth Fire Department

Fruitland Area Fire Department

**Fulton Fire Department** 

Gainesville Fire Department

Glasgow Fire Department

Goodman Fire Department

Gordonville Fire Protection District

**Grand Fire Protection District** 

**Gravois Fire Protection District** 

Greene County Fire Training

Hannibal Fire Department Hannibal Rural Fire Department

Hayti Fire Department

Hazelgreen Fire Protection District

Heartland Fire Department

Hermann Fire Company 1 Incorporated

Hickory County Fire and Rescue High Ridge Fire Protection District Highlandville Fire Protection District Holts Summit Fire Protection District

Hot Springs Fire Department Houston Fire Department Iberia Fire Department

Inter City Fire Protection District Jefferson City Fire Department

Johnson County Fire Protection District Johnson County MO Fire Association Kansas City Aviation Department

Kansas City Fire Department Kansas Fire and Rescue Training Institute

Kearney (NE) Volunteer Fire Department Kearney Fire and Rescue Protection District

King City Fire Department Knox County Rescue Squad Lake Area Technical Institute

Lambert St. Louis International Airport

Lanton Fire Department Lexington Fire and Rescue Liberal Rural Fire Department Lincoln Airport Authority

Lincoln County Fire Protection District 1

Linn Fire Protection District

Livingston County Fire Chiefs Association

Lockwood Fire Department
Louisiana Fire Department
Macon Fire Department
Mansfield Fire Department
MARC Training and Exercise
Marshall Fire Department
Marshfield Fire Department

Maryville Department of Public Safety Mehlville Fire Protection District Missouri Association of Fire Districts Missouri Department of Agriculture

Missouri Department of Health and Senior Services

Missouri Department of Natural Resources

Missouri Fire Chaplains Corps

Missouri National Guard - 70th Troop Command

Missouri Office of Homeland Security

Moberly Fire Department
Monarch Fire Protection District
Monett Rural Fire Association
Moreau Fire Protection District
Mountain Grove Fire Department

Myrtle Fire Department

Nebraska State Volunteer Firefighter's Association

Nixa Fire Protection District

Nodaway County Ambulance District Noranda Aluminum Incorporated Norborne Volunteer Fire Department Northeast R-IV Rural Fire Association Inc. Northwest Arkansas Regional Airport

Norwood Fire Department

Old Monroe Community Volunteer Fire Department

Osage Beach Fire Protection District

Osage Fire Protection District Ozark Fire Protection District Pacific Fire Protection District

Peace Valley-White Church Fire Protection District

Perryville Fire Department Pilot Knob Fire Protection District Pittsburg Volunteer Fire Department

Polk County Fire, Rescue and Training Association

Pomona Fire Protection District Poplar Bluff Fire Department Potosi Fire Protection District

Pulaski County Fire Chiefs Association

Purman Community Volunteer Fire Department

Quad County Fire Protection District Ray County Chiefs Association

Region D RHSOC

Republic Fire Department Richmond City Fire Department

Rock Community Fire Prevention Bureau Rock Community Fire Protection District

Rolla Rural Fire Department

Rosecrans ANG 139 Air WG Fire Department

**Rover Fire Department** 

Saline Valley Fire Protection District

Savannah Fire Department Scott City Fire Department Seymour Fire Department Shelbina Fire Protection District Sni Valley Fire Protection District South Metro Fire Protection District

Southern Iron County Fire Protection District Southern Stone County Fire Protection District

Springfield Fire Department

Springfield-Branson National Airport St. Clair Fire Protection District St. James Fire Department St. Louis County Fire Academy St. Louis Fire Department St. Robert City Fire and Rescue

State Emergency Management Agency Ste. Genevieve Fire Department Sunrise Beach Fire Protection District

Theodosia Fire Department
Tri-County Fire and Rescue
Urbana Rural Fire Department
USDA Department of Agriculture
Vernon County Ambulance District
Vero Beach Municipal Airport

Veterinary Medical - University of Missouri

Vienna Volunteer Fire Department
Wardell Volunteer Fire Department
Warrensburg Fire Department
Warrenton Fire Protection District
Washington Fire Department
Watertown Fire Department
Watertown Fire Department

West Central Fire Protection District West Peculiar Fire Protection District

West Plains Fire Department

Western Taney County Fire Protection District Westphalia Community Fire Protection District

Willard Fire Protection District Winfield-Foley Fire Protection District Wright City Fire Protection District



Missouri's mascot since 1986. Photo: MU Extension



#### **SERVICES**

Subsidized Training at No-Cost
Low Cost Fee or Tuition-Based Training
Student Records and Transcripts
State and National Accreditation/Recognition
National Fire Academy POC
Liaison with Other Organizations/Associations
Curriculum Development
Technical Advising

#### TYPES OF TRAINING

Firefighting
Technical Rescue
Hazardous Materials/WMD
Aircraft Rescue and Fire Fighting
NIMS/ICS and IMT
Driver/Operator
Fire Instructor
Fire Officer
Anti-Terrorism
Emergency Management
Emergency Exercises and Evaluations
Industrial Fire and Rescue
Specialized Programs

#### TRAINING AVAILABLE THROUGH

Field Extension - Local Delivery On-Campus Registered Programs Regional/State Fire Schools and Conferences

Fire and Rescue Training Institute University of Missouri Extension

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